

Amendments To The Claims

The following claim listing replaces all prior versions of the claims in the application.

Claim Listing:

1-6.(Canceled)

7.(Previously Presented) A frequency converter for converting an intermediate-frequency television signal to a low frequency comprising:

a mixer having a first and second inputs and an output;

a first filter coupled to said first input of said mixer, said first filter processing an intermediate-frequency signal into an output signal comprising a selected channel and residues of upper and lower adjacent channels;

an oscillator coupled to said second input of said mixer and adapted to provide an oscillator-signal (u) lying in a range of said lower adjacent channel; and

a second filter coupled to said output of said mixer, said second filter having a high-pass selectivity skirt for attenuating said residues of said upper and lower adjacent channels to a negligible residual amplitude.

8.(Previously Presented) The frequency converter of claim 7, wherein a frequency offset (df) of the oscillator signal (u) from the lower adjacent channel is less than a high-pass cutoff frequency (fg) of the second filter.

9.(Original) The frequency converter of claim 8, wherein the mixer is fed at the second input with a quantized local-oscillator signal (u), and harmonics produced by the mixer are suppressed in a television signal by means of a low-pass selectivity skirt of the second filter.

10.(Original) The frequency converted of claim 9, wherein the local-oscillator signal (u) is a square-wave signal, having the values +1 and -1.

11.(Original) The frequency converter of claim 7, further comprising a control unit coupled to said oscillator, wherein the oscillator is digitally controlled by said control unit according to a respective television standard or respective channel spacing.

12.(Previously Presented) The frequency converter of claim 7, further comprising digitizing means coupled to said second filter, said digitizing means for digitizing a television signal for further signal processing by an analog-to-digital converter.

13.(Previously Presented) A method for processing an intermediate-frequency television signal comprising the steps of:

filtering an intermediate-frequency signal with a first filter to provide a filtered intermediate-frequency signal comprising a selected channel and residues of upper and lower adjacent channels;

generating an oscillator signal (u), the oscillator signal (u) lying in a range of said lower adjacent channel;

mixing said filtered intermediate-frequency signal and said oscillator signal (u);

filtering said mixed signals using a second filter having a high-pass selectivity skirt to attenuate said residues of said upper and lower adjacent channels to a negligible residual amplitude; and,

separating said filtered mixed signals into visual and audible components for reproduction.

14.(Original) The method of claim 13, wherein said first filter comprises a surface-wave filter.

15.(Previously Presented) The method of claim 13, wherein a frequency offset (df) of the oscillator signal (u) from said lower adjacent channel is less than a high-pass cutoff frequency of the second filter.

16.(Previously Presented) The method of claim 15, wherein said oscillator signal (u) is quantized, and further comprising the step of suppressing harmonics produced by said mixing using the second filter.

17.(Original) The method of claim 16, wherein the oscillator signal u is a square-wave signal having values +1 and -1.

18.(Previously Presented) The method of claim 13, further comprising the step of digitizing said filtered mixed signals.

19.(Original) The method of claim 13, further comprising controlling said oscillator signal (u) with a control device, wherein said oscillator signal (u) is digitally controlled according to a respective television standard or respective channel spacing.

20.(Original) The method of claim 13, further comprising the step of feeding said oscillator signal (u) from a digitally controlled oscillator whose frequency is determined by control signals (po) from a control unit according to a respective television standard or respective channel spacing.

21-22.(Canceled)